Application		Applicant(s)	Applicant(s)	
Notice of Allowability	10/765,766	SEVERSON, MATTI	HFW I	
	Examiner	Art Unit	1244 C.	
	An T 1	2816		
	An T. Luu	2816		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.				
1. This communication is responsive to <u>Amendment filed on 4-5-06</u> .				
2. The allowed claim(s) is/are 1-3,6-9,11-16,18,19,21,22,25-31,33,34 and 37-45.				
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some* c) ☐ None of the:				
1. Certified copies of the priority documents have been received. 2. Continue of the priority documents have been received in Application No.				
2. Certified copies of the priority documents have been received in Application No				
3. Copies of the certified copies of the priority documents have been received in this national stage application from the				
International Bureau (PCT Rule 17.2(a)).				
* Certified copies not received:				
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.				
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.				
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.				
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached				
1) hereto or 2) to Paper No./Mail Date				
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date				
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).				
 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. 				
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Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice	of Informal Patent Application (PTC)-152)	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		ew Summary (PTO-413),		
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0	Paper	No./Mail Date ner's Amendment/Comment		
Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☒ Examiner's Statement of Reason		ner's Statement of Reasons for Allo	wance	
of Biological Material	9. ☐ Other _	~ myh	aghor	
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REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: Applicant has amended claims to incorporate allowable features indicated in the previous Office Action.

Specifically, none of the prior art teaches the following limitations:

- The counter is a M/N:D counter wherein D is related to a duty cycle of the output clock signal; the control circuit generates the output clock signal with a falling edge of the output clock signal based on a rising edge of the input clock signal if the comparator signals indicate that the counter has a value greater than or equal to D and less than D+M/2 as required by claims 1, 6, 19 and 31.
- A mode control input to override the control circuit wherein the control circuit generates the output clock signal with a rising edge and a falling edge of the output clock signal based on a rising edge of the input clock signal irrespective of the comparator signals as required by claims 9, 30 and 42.
- A third comparator circuit as recited in claim 11.
- A storage area containing data indicating which of the M cycles of the output clock signal having a rising edge based on a rising edge of the input clock and which of the M cycles of the output clock signal having a rising edge based on a falling edge of the input clock, the control circuit using the storage area data to generate the output clock signal as required by claims 14, 18, 28, 29, 40 and 41.
- The counter is a M/N:D counter wherein D is related to a duty cycle of the output clock signal; the control circuit generates the output clock signal with a falling edge of the output clock signal based on a rising edge of the input clock signal if the

comparator signals indicate that the counter has a value greater than or equal to D+M/2 and less than D+M as required by claims 25 and 37. And,

The control circuit is configured to select a rising edge of some cycles of the output clock signal based on a rising edge of the input clock signal, and a rising edge of some of other cycles of the output clock signal based on a falling edge of the input clock signal, and to select a falling edge of some cycles of the output clock signal based on a falling edge of the input clock signal as required by claim 43.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 571-272-1746. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

An T. Luu 4-12-06 MY-TRANG NUTON
PRIMARY EXAMINER